Newsletter of the North American Mycological Association

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# President's Report Fall 2016

By David Rust

Kudos to the Shenandoah foray committee! Beautiful setting with great views! Our members really enjoyed mushroom forays in Shenandoah National Park. Organizing this foray was a lot of work; despite glitches that could not be foreseen, the foray committee worked full time at the event to make it a success. Everyone's questions were answered and problems solved throughout. Thanks again to Bruce, Becky, Connie, William, Elizabeth, Martin, Tony… and all the folks who made it happen.

We've managed to cut the Board of Trustees meeting to ½ day instead of a full day or more. The benefit is obvious: folks don't have to pay an extra day food and lodging, or endure a full day of drawn out budget discussions, but the downside is that the agenda has to move quickly through a number of items and we may not devote enough time to important subjects.

This year, the Board voted to fund processing all the Voucher Collection data – 20 years' worth – into The Field Museum of Chicago database. Besides an overall effort by Patrick Leacock, volunteers at the Museum will assist. Once the task is complete, the entire collection data, photographs and species list will be available online.

Stephen Russell, Chair of the Mycoflora Committee, has initiated a study of 241 *Amanita* (plus 3 *Limacella*) collections from our voucher collection, which will include running DNA sequences of this material. Metadata produced by this study will be publicly accessible via the MycoMap framework (www.mycomap.com), an online mycology data integration portal. Trustees approved funding for this project at the annual meeting.

Awards presented by Gary Lincoff at this year's foray: Richard Jacob received The Harry and Elsie Knighton Service Award for his outstanding work with the Western Pennsylvania Mushroom Club; and Dorothy Smullen received the Gary Lincoff Award for Contributions to Amateur Mycology in recognition of her many years of devotion to mushroom education.

Ike Forester received the President's Award for Outstanding Service for volunteering to temporarily take over duties as Treasurer. Ike has spent many hours over the past 20 years working on our behalf, including a 6 year stint as President.

Brian Looney is this year's recipient of the NAMA Memorial Fellowship. Brian is a PhD candidate in ecology and evolutionary biology at the University of Tennessee, Knoxville. At the foray, he presented a talk on macroevolutionary patterns in the genus *Russula*.

Howard Goltz was elected Secretary. Howard has participated many years in the photography contest. He's recording secretary for the Minnesota Mycological Society.

We still have vacancies. After many years at the helm of the Education Committee, Sandy Sheine is stepping down. We need someone to take over this important NAMA committee. Medicinal Mushrooms is an important topic to our members. I'm looking for someone with deep knowledge of this emerging science. NAMA needs a new chair of the Marketing Committee to direct our membership, fundraising, and outreach efforts. We have several regional trustee elections coming up in the next month or so. If you would like to volunteer, contact me at president@namyco.org or call me at 510.468.5014. Please consider helping NAMA grow and expand!

# UPCOMING FORAYS & OTHER EVENTS

The events page of *The Mycophile* publicizes forays and events of NAMA affiliated clubs which may be of interest to our members. If you would like to list your club's next big event, contact Dianna Smith, Editor: mycophile@namyco.org.
Include date, location, brief description, link for information, and host organization name.
To post your event on the NAMA website, contact the webmaster: webmaster@namyco.org.

**December 2-5: GULF STATES MYCOLOGICAL SOCIETY WINTER FORAY** at Camp Hardtner in Pollack, LA. Registration deadline is November 25. For information contact Patricia Lewis, 262 CR 3062, Newton, Texas 75966.

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# REGIONAL TRUSTEES NOMINATION FORM

**Please send the information outlined on the form below to Kathy Yerich by email: kathy.yerich@gmail.com, or by mail: 932 15th Avenue SE, Forest Lake, MN 55025. Regional Trustee Nomination Form**

**Name of Nominee:** _____ **Email:** _____

**Address:** _____ **Phone:** _____

**Region (see map on p. 3):** _____ **Club (if any):** _____

**Brief Bio:** _____

_____

_____ **Name of Person Nominating:** _____

**E-mail:** _____ **Phone:** _____

**Region (see map on p. 3):** _____ **Club (if any):** _____

# Nomination of NAMA's Regional Trustees for 2017

By Kathy Yerich

As if you hadn't noticed, it's that time of year again… election time! For NAMA specifically, every year four of the total of twelve Regional Trustee positions are due for nomination and election by NAMA members in the respective region.

The following regions have openings for three-year terms to begin in 2017: Pacific Central and Boreal Region (unfilled from 2016). Trustees from the Plains Region (Maxine Stone) and Gulf States (Patricia Lewis) have agreed to run for re-election.

The affiliated clubs for each region are listed below; members without a club affiliation are members of the region where they live. Members of each region may nominate themselves or another person in that region. Nominations are due by **November 28th**, 2016, after which you will receive an email ballot for election of the Trustee in your region. **Please send your nominations to NAMA Vice-president Kathy Yerich at kathy.yerich@gmail.com**
What does a regional trustee do? The Regional Trustee acts as a liaison between NAMA and the mycological clubs in their region. Trustees are asked to promote growth and development of NAMA by working with local clubs in a variety of ways, including: posting club events on the NAMA website; sending NAMA information to local club websites, newsletters and message boards; and encouraging local club members and non-affiliated clubs to join NAMA. Each regional trustee is also responsible for submitting an annual report of their activities to the Board of Trustees for the board meeting. See the May-June *Mycophile* for biographies of recently elected Trustees David Wallis (Rocky Mountain), Gene Kremer (Great Lakes) and Nancy Ward (Appalachian) in the July-Aug issue.

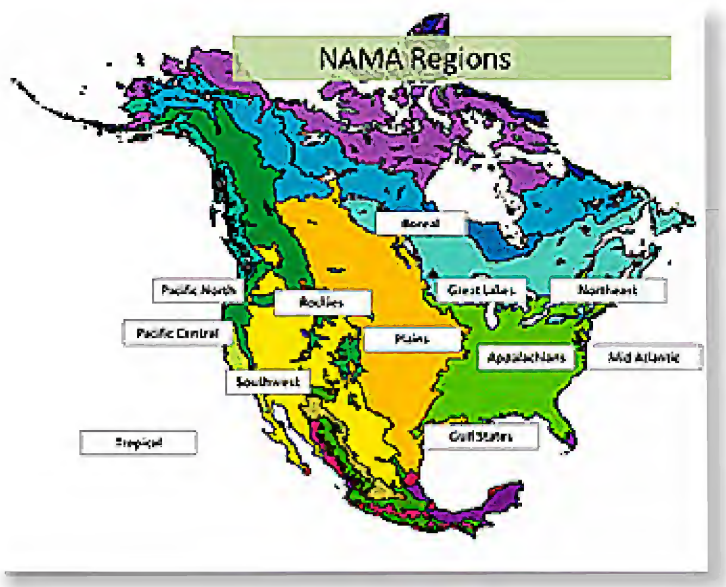
**Boreal**
Alberta Mycological Society
Foray Newfoundland & Labrador

**Gulf States – Patricia Lewis**
Gulf States Mycological Society

**Pacific Central**
Bay Area Mycological Society
Cascade Mycological Society
Fungus Federation of Santa Cruz
Humboldt Bay Mycological Society
Lincoln County Mycological Society
Mycological Society of San Francisco
North American Truffling Society
Oregon Mycological Society
Sacramento Area Mushroomers
Sonoma County Mycological Association
Willamette Valley Mushroom Society

**Plains – Maxine Stone**
Arkansas Mycological Society
Kaw Valley Mycological Society
Missouri Mycological Society
Prairie States Mushroom Club

**Kindly send the information required in the nomination form on page 2 of *The Mycophile* to Vice-President Kathy Yerich.**



# 2016 NAMA PHOTO CONTEST WINNERS

## DOCUMENTARY DIVISION

## FIRST PLACE

**Mary Smiley**

***Hypholoma brunnescens***

# 2016 NAMA PHOTO CONTEST WINNERS

## DOCUMENTARY DIVISION

## SECOND PLACE

**Bill Yule of CVMS**

***Suillus spraguei***
***(Suillus pictus)***

## THIRD PLACE

**Geoff Blame**

***Hygrocybe flavescens***

# HONORABLE MENTION PHOTOGRAPHS

## DOCUMENTARY DIVISION

John Dawson

***Arcyria cinerea*** and
***Polycephalomyces tomentosus***

Alissa Allen

***Phyllotopsis nidulans***

Dianna Smith

***Hygrophorus chrysodon***

Alissa Allen

***Tolypocladium capitatum***

# DOROTHY SMULLEN:

# NAMA's 2016 GARY LINCOFF Award for Contribution's to Amateur Mycology

We, Anna Gerenday and Ann Fallon, are pleased to recommend Dorothy Smullen for the Gary Lincoff Award for Contributions to Amateur Mycology.

In 1975 Dorothy Smullen joined the New Jersey Mycological Association (NJMA) marking the beginning of a long involvement in amateur mycology that she still sustains after 40 years of intense activity.

NJMA: After joining NJMA Dorothy became immersed in teaching and organizing. Graduate work at Brooklyn College in New York, leading to an MA in Botany, prepared her to teach diverse topics such as use of dichotomous keys, and applying microscopy to mushroom identification. In those early days when most of us were just starting to notice fungi, she formed a Taxonomy "group" that met once a month in her house to discuss problems of identification, and to identify mushrooms for which she made her microscope available.

From the time she joined NJMA, she was involved with organizational duties. Within a year she was editing the newsletter, a duty she performed for 4 years, and later served as vice president, then president holding those offices for the maximum term allowed by the bylaws of NJMA. She worked on many projects including taxonomy, Education, Slide library, Nominations, Outreach, Ray Fatto Scholarship, Trustee, BioBlitz, children's programs. Dorothy's heart was always in teaching and when the club established its formal educational program, Dorothy became one of the teachers.

Beginning with the first NJMA annual Fungus Fest in 1979, Dorothy's workshops have included mushroom identification, demonstrations on using the microscope, making spore prints and working with dried specimens. Her "Mushrooms under the Microscope" included an inside look of truffles, growth of slime molds, description of lichens, and showing the types of mushrooms found in the bag of Otzi, the iceman. For a few years at her initiative, all those who helped at the foray gathered at Dorothy's house to celebrate. She is a social person, often holding gatherings at her house to celebrate mycological events.

"Enlichenment": Dorothy is fascinated by the intricate mutualism that exists between fungi and other organisms. She was always interested in lichens, an interest that intensified following the 1997 IFFS at Paul Smith's College.

As a biology teacher, she was selected to participate in New Jersey Business/Industry/Science/Education/ Consortium's (NJ BISEC) Institute for Microbiology for science teachers for which she prepared a project on lichens for middle schools. Soon "enlichenment" of NEMF and NAMA followed. For a number of years now, Dorothy has been the lichen identifier at NEMF and NAMA. At the 2011 NAMA foray in Clarion, PA, she presented a lichen workshop that she will be presenting again at the 2016 NAMA Foray.

NEMF (North East Mycological Association): NEMF was formed in 1976 and Dorothy was there! She became actively involved, increasing her level of participation over the years; she has attended every meeting. As a stickler for accuracy coupled with her keen understanding of the importance of keeping records and preserving collections, Dorothy became (1982), and remains to this day, the hardcopy editor of the NEMF fungal list, which has benefited from her detailed observational skills. In 1987 she chaired the foray at Muhlenberg College, Allentown PA, and was involved in program planning. She was the recipient of the NEMF Eximia award for contributions to amateur mycology. Dorothy was elected President of NEMF from 2003-2005.

Outreach to the public at large: As Dorothy's knowledge of fungi expanded so did her teaching; giving workshops on mushroom identification and coordinating events at BioBlitzes in New Jersey. She lectures widely on scholarly topics including the genus Marasmius, the common ascomycetes, jellies, poroids and parchment fungi that are often overlooked on forays. She has lectured on the cultural uses of lichens, as well as on approaches to their identification. Finally, she has given talks on mycorrhizal associations including arbutoid, monotropoid, ericoid and orchid types. Funded by a grant from Toyota, Dorothy engaged high school students in a project of mapping lichens in the vicinity of the school. At Garden Clubs (where she has been a speaker for 35 years) and more informal public events she presents on cultural and craft applications and activities working with shelf fungi, and others with catchy titles like *Mushroom Mania*, *The Rainbow of Plant and Fungi Dyes*, and *Like-able Lichens*.

Curation: Dorothy is a consummate and accurate record keeper of fungi. As a volunteer she keeps records on fungi at the Great Swamp Wildlife Refuge and New Jersey Audubon, Sherman Sanctuary. Together with Bob Peabody and Gene Varney, Dorothy co- organized the NJMA fungal collection, fungarium, named after Raymond Fatto and Dr. Eugene Varney, two other prominent members of NJMA. The collection contains 2,700 specimens, and it is housed at the Chrysler Herbarium of Rutgers University. She was a member of the Rutgers Creek fungal diversity study 2000—2007; 524 species were collected, identified and placed in the Paul F. Brandwein Institute. For the past 10 years, Dorothy has co-chaired the fungi section of the Union County, NJ, Parks Department yearly Bio-Blitz. She keeps a spreadsheet for this June event, and sets up and hosts the display exhibit table.

Clearly, Dorothy's many contributions exemplify the very best in amateur mycology! Respectfully,

Anna Gerenday & Ann M. Fallon

# Richard Jacob: 2016 Recipient of NAMA's Harry and Elsie Knighton Service Award

Richard Jacob is, and has been, very active as a club officer, mushroom walk leader, writer of newsletter articles, workshop and course materials, cook and photographer of the Western Pennsylvania Mushroom Club. In addition to all of these accomplishments, he has almost single-handedly made major contributions in three very significant areas.

To improve the club's image and communication, Richard undertook a major revision of the WPMC website (wpamushroomclub.org). He created new interfaces and easier access to club, regional and national activities. Using modern technology, he has brought the club into the 21st Century connecting to social media and blogs while preserving some of the traditional access to club news, calendars and adding educational material, previous lectures and courses.

He updated the decades old species list, with its outdated nomenclature and duplicate entries, by using a computerized program for documenting species collected on club forays and on the club's species life list. This new system updates the most current changes in fungi nomenclature as well as preserving older, more familiar names. It also adds which species have confirming DNA sequencing. The program also allows or links to accompanying photos of the species from the local area taken by WPMC members rather than referring to stock photos on the web.

With his extensive background in proteomics, Richard introduced a process that can be used to field photograph a specimen, annotate it using scientific descriptions, and prepare a sample for DNA sequencing. This process is elevating the science of the Western Pennsylvania Mushroom Club from species identification by taxonomy to state-of-the-art DNA barcoding. Through his expertise, this WPMC program is recognized at a national level as a model for others to follow. He has worked with universitities and professional staff to have the samples analyzed and reported the results. At the 2013 WPMC foray, he invited Rod Tulloss to focus on the identification of *Amanita* fungi, Based on this expertise, Richard was named Chair of the new NAMA Mycoflora Committee.

His infectious enthusiasm and willingness to share his extensive expertise has helped the WPMC reach a high level of professionalism while keeping the practical aspects of identification within everyone's reach.

Richard Jacob's service to the WPMC has been 'value added' in his dedication to new approaches to move the club forward. We offer this endorsement as support for his deserved recognition.

Submitted by members of the WPMC.

Richard Jacob

# Gary Lincoff Award for Contributions to Amateur Mycology

NAMA's Gary Lincoff Award for Contributions to Amateur Mycology is given annually to recognize a person who has contributed extraordinarily to the advancement of amateur mycology. Its recipients have often extensively conducted workshops, led forays, written or lectured widely about mushrooms and identifying mushrooms, all on a national or international level.

Selection among nominees is made by the voting of past award winners, and the award includes a plaque and lifetime membership in NAMA. Nominations are accepted until April 1st of the award year.

A name alone is not a sufficient nomination; neither is a profile on a website. Nominations for this award should include a description of the accomplishments the nominee has made in the field of amateur mycology.

The recipient must be living at the time of the award.

Nominees who were not selected to receive the award are automatically re-nominated for 4 additional years, after which the nominee's name has to be re-submitted, and it's up to the nominator to keep track of this.

Send a single copy of a Nomination by mail or email to: mycowalt@comcast.net

WALT STURGEON: Chair, NAMA Awards Committee
288 E North Avenue
East Palestine, OH 44413-2369

# The Harry and Elsie Knighton Service Award

The Harry and Elsie Knighton Service Award was established by the NAMA Board of Trustees to recognize and encourage persons who have distinguished themselves in service to their local clubs. It is named for the Knightons, whose efforts began the North American Mycological Association in the 1960's. The annual award consists of a plaque; publicity for the winner and club in The Mycophile; a one-year membership in the organization; and registration, housing and foray fees for the next NAMA Foray.

Each year's recipient is selected by the three most recent recipients of the Award.

**Every NAMA-affiliated mycological club may nominate one candidate whom it feels has performed meritorious service during the current or preceding year, which has to be described!**

Unselected nominees are automatically re-nominated for two additional years.

Nominations are accepted until April 1st of the award year.

Send a single copy of a Nomination by mail or email to: mycowalt@comcast.net

WALT STURGEON: Chair, NAMA Awards Committee
288 E North Avenue
East Palestine, OH 44413-2369

**Please, remember to honor deserving candidates for these two prestigious NAMA awards of recognition by sending in your nominating letters prior to April 1, 2017!!**

# NAMA Shenandoah Foray Watercolor Workshop: Mushroom as Muse

By Allison Abernathy (Mycological Association of Washington)

A fellow gardener recently said to me that "mushrooms are the homely stepchildren of the plant world." I was gob smacked! Not so much that he erroneously thought fungi are plants (!), but more shockingly, how can anyone think that mushrooms are anything but beautiful? We mycophiles are a varied tribe — some attracted to mushrooms for their delectable taste, others for their fascinating biology and ecology — and yet most of us also admire their beauty. How often have you looked at a mushroom and admired the play of colors on the cap or the delicacy and translucence of the gills? Some mycologists document the beauty and other-worldliness of mushrooms with incredible close-up photographs — there was much "oohing" and "aahing" during the Annual NAMA Photo Contest. Two well-attended workshops on Saturday morning are evidence of yet another artistic group with a different interest in capturing the beauty and wonder of mushrooms: we want to paint them!

The two watercolor workshops were taught by Denis Benjamin, a Research Associate at the Botanical Institute of Texas. Denis documents wildflowers and mushrooms with his paintings, as well as his books, *Mushrooms: Poisons and Panaceas* and *Musings of a Mushroom Hunter: A Natural History of Foraging*. The classes were held in a relaxing setting on the patio outside the ever-popular 4-H dining hall. Consequently, we enjoyed natural lighting and a lovely view of the Shenandoah Mountains, as well as the admiration of curious passers-by. Our class ranged from beginners sharing loaned brushes to very experienced painters who brought their own copious painting supplies.

Given the range in experience level in the class, Denis started with basic watercolor advice suitable for any subject. He distilled his years of learning into a few fundamentals:

- Save the white (one can always add a dark color; lifting color is much harder).

- Paper remembers every brush stroke (for example, paint curved surfaces with a curved stroke).

- Have a plan (know the order in which you will lay down your colors).

- Let every layer dry before adding more.

Dr. Denis Benjamin assisting participant

He then went on to a more philosophical discussion of the difference between botanical illustration and art. In botanical illustration, the objective is to perfectly copy every detail to provide a scientifically accurate depiction of the subject. In this workshop, our goal was to produce a work of art — an expression of the artist's creativity and vision of the subject.

Every group of painters selected a mushroom to paint. Though each person in a given group was painting the same mushroom, our perspectives and styles varied greatly. Most paintings were done in a representational style — showing some degree of detailed structures — while others concentrated primarily on the play of color (a style called "colorist'). Thanks to this enriching workshop, I am a now different kind of mushroom hunter. I pay close attention to small details as if I might paint each mushroom. Is the texture on that polypore rubbery, silky, or papery? Note the gradation of oranges from peach to tangerine on a vivid Chicken of the Woods.

That Veiled Oyster is weeping droplets in the center, how would I paint those? And if I don't find an edible mushroom on a foray, that's just fine. I am happy to walk and observe and practice what the Japanese call Shinrin-yoku, or "taking in the forest atmosphere".

Names of some of the fungi artists in this photo: (Standing left to right): Rebecca Rader (New River Valley Mushroom Club), Rhoda Roper (New Jersey Mycological Association); (Sitting at the picnic bench): S. Marie Kopin (Michigan Mushroom Hunters Club), Nancy Osgood (Mycological Association of Washington) and Allison Abernathy (Mycological Association of Washington), Mark Bower, (Missouri Mycological Society)

# Thoughts, Lecture Highlights & Photos of the 2016 Shenandoah Foray

By Dianna Smith

The 2016 national NAMA Foray (September 8-11) in Virginia was sponsored by the Mycological Association of Washington and the New River Valley Mushroom Club in Front Royal. We were stationed at a 4H facility where we were treated to stunning views of the surrounding mountains, especially at sunrise and sunset. The facilities were generally fine perhaps with the exception of the auditorium, where all of the evening and a few of the daytime lectures were given. Neither high humidity and temperatures indoors and out, nor the lack of moving air to stave off melting into a puddle of perspiration could deter even the most crotchety or spoiled of us from having a good ole mycological time. (The food on the other hand, was observed to have made more of us cranky than might normally be the case - especially considering that many of us willing traveled hundreds or even thousands of miles at significant cost in order to 'rough it a bit' for the opportunity to be with other foragers sharing similar interests). Some of us not finding many fungi in their towns, anticipated going out daily to enjoy each other's company, get a feel for the region and its people, but especially to collect as many different species as possible. That is why we come to forays after all, isn't it? - Not for the cuisine.

As with the three other east coast multi-day forays I attended in late July through September - including the NEMF Foray in Fitchburg MA, the White Mountain Foray in Albany NH, and the COMA Foray in Copake NY - the absence of adequate rainfall made it challenging to find the charismatic fungi we typically encounter at this time of year. I attended the first walk held on Thursday afternoon with a group of foragers eager to get into the woods and collect as much as we could. With considerable effort spent in turning over logs and branches, we just managed to fill the bottom of our collecting baskets with an assortment of sticks bearing many interesting small fungi, often in poor but recognizable condition.

*Rosellinia* sp.

Fortunately, we had Gary Lincoff with us. He has been inspiring members of the New York Mycological Society on winter weekend walks in the NYC Boroughs over the past few years to find and identify normally ignored fungi on wood substrates. His enthusiasm was contagious and soon we were all excited to be foraging for assorted colorful crusts and colonies of little black 'dots'.

Michael Weese looking on as Gary Lincoff examines a specimen with his loupe

Aside from attending the Thursday morning Trustees' Meeting, spending time with old friends and making new ones, the main reason I was eager to participate in this annual NAMA event was driven by a personal obsession with learning as much as possible from the talented invited faculty. So many opportunities are offered at a NAMA foray to please all of our disparate interests. The main 'problem' is deciding which of many good choices occurring simultaneously to attend. I decided in advance to focus on russulas, *Lactarius* and boletes.

These great photos were contributed by some of the men and women who took Susan Hopkins' workshop on dyeing with fungi.

The many Friday talk options included a program by Mark Jones on growing gourmet and medicinal mushrooms; Debbie Viess spoke on '*Amanita* Toxins: Deep Analysis and Myth-Busting'; Ryan Kepler gave a presentation featuring 'Insect Pathogenic Fungi of the Appalachians'; and Tradd Cotter's myco-remediation program 'Mushroom Rescue Modules – Mushroom Production, Water Filtration, and Mosquito Abatement'. There was also an introductory microscopy workshop with Shannon Nix and a well-attended presentation by Michael Castellano on truffles of Eastern North America that was the highlight experience of participants.

Since the talk I wanted to attend on russulas started a bit later in the morning, I decided to sit in on Arleen Bessette's program for beginners entitled 'Coming to Your Senses: The Subtle Art of Mushroom ID'. All the folding chairs for this well-organized program were filled beyond capacity. Arleen's program was useful for both novices and experienced mycophiles who are looking for ideas to assist beginners interested in learning about mushrooms. Her advice was based on observational techniques both she and Alan are employing to differentiate between confusing species that can appear to be frustratingly similar. Arleen did an excellent job emphasizing the importance of using all of our faculties to describe a fungus in writing and drawing prior to going to books or asking others on Facebook, for example, what the name of a fungus is and whether or not it is edible.

© Dianna Smith

The next program I attended was given by the 2016 NAMA Memorial Fellowship recipient, University of Tennessee PhD candidate Brian Looney (in photo on left). Brian is studying the ecology and macro-evolutionary patterns of russulas, of which there are a total of 425 described species in North America (and potentially hundreds more that are undescribed). This includes 335 described from NA and 90 European species. Incidentally, a number of our russulas that have European names are genetically identical to European species such as *Russula fragilis*, *Russula vinacea*, *Russula aquosa* and *Russula betularum* to name a few.

Brian is currently working on a systematic revision of the described red russulas of the northeast in the *Rosinae* group to determine if variations observed in the type species collections are undescribed and new species or are just morphologically variable. Russulas in the *Rosinae* have cap colors that range from red to white to yellow; have a mild taste, lack pileus cystidia and have primordial hyphae instead. He is using evolutionary models and population genetics through time to generate species hypotheses to see what morphological and micro-morphological aspects are the same. To do this, he is sequencing several genes, not just the ITS region and is using chemicals like PDAB that have not previously been employed in the study of russulas. All russulas in the *Rosinae* group turn purple or magenta with application of PDAB.

Laser jet print of a photo of Rod Tulloss holding an *Amanita*.

I had already marked up my Schedule of events to go to Rod Tulloss' program describing recent Amanita research, but at the last minute he had to cancel due to a medical issue. In his honor, some thoughtful person taped a 8" X 12" laser printed photo of him at the front of the display table where a few shriveled *Amanita* species kept his image company and remind us of how much we missed him. But given the relatively small number of amanitas that came in over the three collecting days, I couldn't help thinking that he would have relatively little material available for study. Instead I examined the specimens on the display tables and listened in on Gary Lincoff's excellent presentation 'Amateurs Can Make a Difference: Developing a Mushroom Survey in Your Area.'

Saturday's programs included Jay Justice's 'Entolomoid Mushrooms of Eastern North America'; Dorothy Smullen's 'Fairy Rings and Pinwheels: The Genus *Marasmius*'; Rytas Vilgaly's 'Fungal Genetic Diversity: Barcodes, Sequences, and a Role for NAMA'; James Lendemer's 'Lichens of the Smokies and Shenandoah' and several workshops. There were both morning and afternoon workshops led by artist and physician Denis Benjamin to hone participants' observation as well as artistic skills using watercolors and paper to create paintings of fungi displayed before them. (See article by Allison Abernathy on p. 11-12). There was also a popular 'Lichen Field Study with James Lendemer and a two and a half-hour program by published nature photographers Rob and Ann Simpson called 'Fungi, Fun and Photography'. I noticed it was well-attended and expect we will see several new contributors to next year's annual NAMA photo contest.

© Dianna Smith

Rhoda Roper's watercolor of *Cerioporus squamosus (Polyporus squamosus)*

© Dianna Smith

Early Saturday morning at breakfast we noticed a quietness descended upon the dining hall as outside temperatures began to rise. No lights, no humming refrigerator or air conditioning units. The electricity was out in the entire town. Oh, Oh. How were the morning programs going to proceed in warming, darkened presentation rooms lacking live oulets for projectors? Not a problem. Patrick Leacock (photo on left) began his historical review of 'Name Changes: 200 Years of Opinions', while we looked on at his computer display. Not long after starting his talk, the power was restored. This was the second time I listened in and took notes on a program Patrick delivered on the topic of name changes, which was aptly followed by Conrad Schoch's 'Fungal Names on Genbank'. The topic interests me and I learned that I probably could use a repeat experience on a future NAMA foray!

After lunch I attended the presentation by Andy Methven called 'Appalachian Species of *Lactarius*'. It covered the basics of categorizing the various species into groupings sharing a set of defined characteristics. The final afternoon presentation I attended was given by Alan Bessette. Like Arleen's program the day before, he stressed the importance of writing down every detail in your own words you observe when describing a particular fungus. Doing so facilitates recognition of a species in its different guises from initial fruiting, through maturation and decomposition. In addition to noting morphological characteristics, staining and chemical reactions, we need to determine odors if any and tastes between the various and often confusing 'Red-Capped, Blue Staining Boletes'. In applying these techniques themselves, he and Arleen discovered that a helpful previously unmentioned characteristic of *Leccinum rubropunctum* (*Boletus rubropunctus*) is that it smells like an ashtray filled with old cigarette butts. They have given it the common name 'Ashtray Bolete'. I am anxious to receive my Amazon pre-order of the upcoming book by Alan and Arleen Bessette, and William Roody entitled *Boletes of Eastern North America* to be released on November 15th. It promises to contain minor corrections, newly accepted names and additional information based on personal experiences with additional and newly described species not covered in their popular *North American Boletes: A Color Guide to the Fleshy Pored Mushrooms*.

Other highlights of the NAMA event included the evening programs. On Thursday night,Roy Halling delivered a fascinating presentation featuring fungi, including unusual boletes, found growing through sand in Australasia in association with Gum trees. The major evening presentation on Thursday evening was given by Dr. Catherine Aime, 'Searching for Fungal Dinosaurs in Guyana's Lost World'. The final presentation of the evening program was given by foray Chief Mycologist Walt Sturgeon entitled 'Macrofungi and Their Niches'. The latter was outstanding for his outstanding photography as well as the variety of examples presented of fungi on fungi, fungi on plants and fungi on insect hosts.

© Dianna Smith

All in all, the NAMA Shenandoah Foray was a big hit thanks to the orgnizers and their efforts to provide participants with great walk locations, a variety of workshops, and an outstanding selection of guest speakers. And despite the heat and dry weather conditions, over 300 fungi were identified, photographed and vouchered. I am already looking forward to next year's foray in Wisconsin, where I expect the mushrooms and the presenters will also be awesome!

Michael Castellano showing us his truffle digging rake

Rytas Vilgalys and other identifiers at outdoor tented site used for dropping off and labeling finds

*Gomphus clavatus*

Graduate students assisting in display room
Photo by Walt Sturgeon

*Akanthomyces aeculeatus*

'Marshmallow Snowman on Sticks': one of several collections of *Sebacina incrustans*

Arleen Bessette, Patrick Leacock and Alan Bessette
Photo by Walt Sturgeon

*Poronidulus conchifer (Trametes conchifer)*

*Trametes cinnabarinus*
*(Pycnoporus cinnabarinus)*

*Terana caerulea*

Jay Justice reviewing display room fungi
Photo by Susan Hopkins

*Phellinus robiniae*

# 2017 NAMA Northwoods Foray

## Part I. A Preview

By Britt A. Bunyard

## When: 7-10 September 2017

## Where: Lakewoods Resort, Lake NAMAkagon (actual name), Wisconsin

Max number of attendees: 300

**Coordinators:**

Britt A. Bunyard
Emily Stone, Naturalist, Cable Museum of Natural History, Cable, Wisconsin
Patrick Leacock, Field Museum of Natural History, Chicago

Make plans now to be in northwestern Wisconsin next September. Specifically, Bayfield County. This is my absolute favorite place in Wisconsin for both natural beauty and mushrooms, and I know you will feel the same way after next year's NAMA Foray.

Although one of the largest counties in Wisconsin, Bayfield County has not one stoplight. It's mostly National Forest, and in September the forests are carpeted with mushrooms. The habitat is mixed forest: black, red, and white oak species; red, sugar, and mountain maple; birch and poplar; hornbeam and hop hornbeam; basswood; tamarack and black spruce; red pine; and white pine. This is the westernmost limit of the eastern hemlock; they're common here. There are bogs to investigate with pitcher plants and some of the largest populations of lady slipper orchids I've ever seen. Northern Wisconsin's wolf population is increasing steadily (though you may not see any); you will certainly see and hear loons on Lake NAMAkagon daily; black bear and elk are commonly seen, moose less so; this is about the only place in the USA east of the Rockies where you are likely to see fisher and marten. Lake Namakagon is really huge and is one of only three lakes in Wisconsin managed as a "trophy musky lake." The world record musky was caught nearby.

Historically, the Northwoods drew sawyers to the area to fell the massive white pines that abounded. You will get a chance to see giant old growth white pines in several areas; many of these sentinels have been fostering mushrooms for several centuries. Some of our forays will pass along the North Country Trail; this is the longest National Scenic Trail in the USA (4,600 miles) and stretches from NY to ND, linking seven northern states.

*Rhodotus palmatus*

**Foray costs, accommodations, meals**

I'm beginning promotion of this event extra early for two reasons: it will likely be a little more expensive than most NAMA forays in the past, so I'm giving everyone extra time to save their pennies; and there is so much to do in the area (most NAMA members have likely never been to the "North Coast") that you should plan to visit for an entire week or more.

OK, more expensive … what am I getting for the added cost? Firstly, the proposed site is to be the **Lakewoods Resort on Lake NAMAkagon** (www.lakewoodsresort.com) near Cable, Wisconsin. (Again, that's the actual name of the lake!) The Lakewoods is a very comfortable resort with accommodations that will suit everyone. All rooms are hotel style with bathrooms in all suites. The Lakewoods can accommodate 600 guests at one time (largest single meeting room for group dinner together etc can hold 300); in early September we will have the run of the place and I've been assured that all persons requesting ground floor rooms (to avoid stairs) will get one. There is an elevator and all manner of handicap facilities in the main lodge. There is AC and heat in all rooms, of course. There are several styles of accommodations ranging from cozy lodge rooms, to more luxurious condominiums overlooking Lake Namakagon, spacious golf villas among the beautiful fairways and greens of Forest Ridges Golf Course right there on the property … even a few quaint lake homes in a variety of locations along the shores of Lake Namakagon. (For a peek inside the guest rooms at Lakewoods, visit their website above.) I have negotiated a terrific price for our entire package and can assure that the Lakewoods will be an excellent value for the money.

Besides really comfortable lodging, the Lakewoods serves excellent food! (Anyone that's forayed with me knows that good food and drink are Priority 1 with me!) Our foray team has been to the area and the Resort many times and have even worked with the Head Chef in establishing our menu; we're planning several Wisconsin-themed dinners to welcome members in style.

**Mycophobes/companions**

One more thing about our host site. Most NAMA members would be coming for the mushrooms. But many of us, myself included, have spouses or other family members who do not … shall we say, share our zeal for all things fungal. **This foray is for the nonmushroomers, too!** There is so much to do during a stay at the Lakewoods—and mushrooms are not even the half of it. All guests are entitled to use the golf course at no extra charge. Same with the lake, which is right outside your door. There are boats and canoes at your disposal. There is a very nice tennis court and outdoor swimming pool (for the intrepid—September can be chilly); indoors, there is a very nice heated swimming pool and very large whirlpool. All non-motorized recreation is free to all guests. Motorized boats, golf carts, etc. are available for a small fee.

**Foray sites**

I have already checked out many of the proposed foray sites as I lead programs in the area each autumn for the Cable Natural History Museum and give lectures at the museum, Lakewoods, or other resorts in the area. (Yes there are additional great places to dine in the Cable area!) Most foray sites are a short drive (under 30 min) from Lakewoods Resort. There are also National Forest trails that cross the Lakewoods property for forays too. Additionally we will have access to a preserve with collecting permission; the preserve ("Fairy Land") is a special place and has been closed to any use for decades. Emily Stone has been working on this for our Foray for a couple of years and I'm really thrilled. Likewise we have picked several really fantastic "all-day" forays for the intrepid.

More details in Part II, next time…

# WHO'S IN A NAME?: *Collybia cookei*

By John Dawson (part 3 of a series)

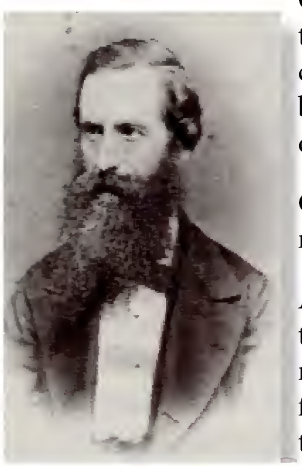
The genus *Collybia*, formerly a large and diverse collection of species, has recently undergone a major taxonomic revision. Consequently, only four species now remain within it, one of which, *Collybia cookei* (Bresadola) Arnold, is a small white mushroom that is parasitic on other mushrooms, especially species of *Russula*. (http://users.skynet.be/deneyer.mycology/ has superb color photographs of it in situ.)

Its specific epithet, *cookei*, commemorates the British naturalist Mordecai Cubitt Cooke (1825–1914), one of very few mycologists who have been the subject of a full-length biography — and no wonder, for his life was extraordinary in several respects.

Born in the village of Horning, Norfolk, Cooke briefly attended a local school, but at age 10 was sent to live with a maternal uncle, a Baptist minister who ran a day school in his church. When he returned home three years later young Cooke was, he later wrote, well-grounded "in the rudiments of Latin, Greek, algebra, etc.", and had developed an interest in botany, fostered by his uncle's habit of sending him out to collect roadside plants, which he was then tasked to identify using books in his uncle's library.

Cooke's formal education was completed by 18-month's study at a commercial academy in a nearby village, where he learned the practical skills of surveying and bookkeeping. He was then apprenticed for five years to a draper in Norwich, whom he served primarily as a bookkeeper. His main interests, however, lay outside his work. Encouraged by his employer to take up bird-watching, he also was active in local choral and instrumental music groups, and sang and played the flute throughout his life.

At 20, aware of the limited economic prospects for a bookkeeper, he moved to London, where he worked as a clerk in a solicitor's office; and the next year he married a woman two years older than he, Sophia Elizabeth Biggs, whose two-year-old illegitimate daughter Annie came with her. The marriage endured until Sophia's death 51 years later, but was anything but conventional. To quote from the entry on Cooke in the Oxford Dictionary of National Biography,



> Cooke had no children with his wife, but from the age of seventeen Annie bore him three sons and a daughter. In 1871 [Annie] left Cooke to marry his step-second cousin, John Quincey Cubitt, but by 1875 had left Cubitt and returned to Cooke, bringing with her young daughter by Cubitt. She then had two more sons and a daughter by Cooke, before finally leaving him about 1890.
>
> Cooke's seven children were thus his wife's grandchildren! It was not an incestuous relationship, but it was certainly a most unusual ménage a trois.

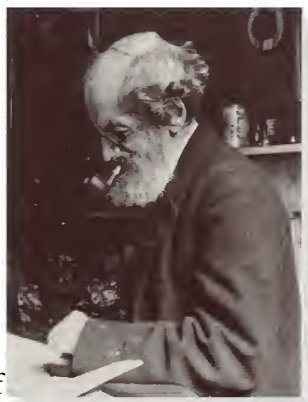
A bout of illness caused Cooke to lose his clerkship, after which he moved briefly to Birmingham before taking up a position as junior master in a private, church-run school for poor children in the Lambeth district of London. He remained there from 1851–60, teaching the boys while his wife taught the girls, and it was during that period that his interest in mycology began. In 1859 he obtained a First Class pass in a governmental botany examination — his only formal academic credential in the sciences — and shortly thereafter began publishing prolifically on a wide variety of topics in natural history, including (besides fungi) algae, ferns, reptiles, pond life, spiders and mites. Cooke was a very successful popularizer, whose twentieth-century counterpart might be Herbert S. Zim.

Relieved in 1860 of his teaching position, Cooke helped to catalog exhibits from New Zealand and India for the

Great International Exhibition of 1862 and then worked for 18 years for the India Museum. In 1862 he also began a 27-year correspondence with M.J. Berkeley, founded the Society of Amateur Botanists, and published *Manual of Structural Botany*, followed the next year by *Index Fungorum Brittannicum*. Three years after that he published *Rust, Smut, Mildew and Mould*, founded the Quekett Microscopical Club (the second oldest microscopical society in Britain, still very active today), co-founded a popular science magazine, *Science Gossip*, and began publishing a series of Exsiccati (collections of dried fungi, mounted on loose pages that were gathered into sets, bound, and sold as books).

Cooke's two-volume *Handbook of British Fungi* appeared in 1871, and the following year he founded the technical mycological journal *Grevillea*, to which he contributed many important taxonomic articles. He became a corresponding member of several American natural history societies, was awarded an honorary M.A. by Yale University in 1873, and in 1880 "was seconded to the Royal Botanic Gardens, Kew, as its first cryptogamic botanist." There he "redoubled his mycological studies", one result of which was the publication, during the decade 1881–91, of the "monumental eight-volume *Illustrations of British Fungi.*" His total published output comprised nearly 350 books and papers.

Throughout his life Cooke was acutely aware of his lower-class origins. Never financially well off, "he was ill at ease", despite his international reputation, "with the gentlemen scientists of his day", many of whom snobbishly regarded him "as a mere technician". In fact, Cooke was a dashing presence: an excellent speaker, writer and artist, he conducted an extensive correspondence with mycologists around the world, and was responsible for arranging the specimens in the mycological herbaria of both the Edinburgh Botanical Garden and the British Museum. His own herbarium and collection of fungal drawings were eventually sold to Kew, and his microscope to the Royal Horticultural Society.



In a few respects, Cooke was a reactionary: In the face of mounting evidence to the contrary, he never accepted that lichens were dual organisms, and he remained largely ignorant of fungal culture techniques. Nevertheless his impact on mycology was great, and toward the end of his life his contributions were recognized by the award to him of the Victoria Medal of Honor and the Linnean Society Gold Medal.

Besides *Collybia cookei*, Cooke's name was memorialized by the Italian mycologist Saccardo, one of Cooke's major correspondents, in the genus *Cookella*. Its type species, *Cookella microscopica*, grows on the underside of oak leaves — a habitat typical of those that Cooke investigated.

# RECOMMENDED FUNGI ARTICLE LINKS

Jan Thornhill's *Inonotus glomeratus* blog: http://weirdandwonderfulwildmushrooms.blogspot.ca/2016/08/natures-spray-paint-inonotus-glomeratus.html

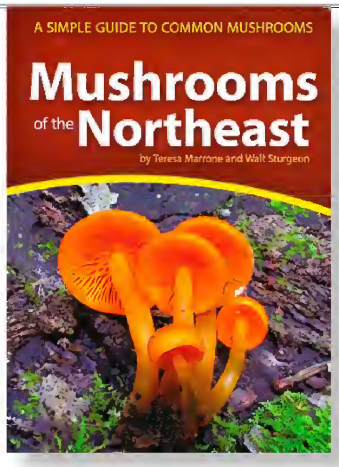
Lichens: https://www.youtube.com/watch?v=KShXU9pwFnI&feature=player_embedded

Matt Swayne of Penn State, 'Trees Rely on a Range of Strategies to Hunt for Nutrient Hot Spots', https://www.sciencedaily.com/releases/2016/07/160718160933.htm

Nathaniel Scharping, 'Tiny Fungus (May Have) Pioneered Life on Terra Firma', http://blogs.discovermagazine.com/d-brief/2016/03/02/440-million-land-dwelling-fungus/#.WBDH0qOZOEI

Jie Song, Jia-Jia Chen, Min Wang, Yuan-Yuan Chen & Bao-Kai Cui, 'Phylogeny and Biogeography of the Remarkable Genus *Bondarzewia* (Basidiomycota, Russulales)', http://www.nature.com/articles/srep34568

# Mushrooms of the Northeast
by Theresa Marrone and Walt Sturgeon




Reviewed by John Plischke

This is not your usual field pocket guide, it has several innovative features. It is 5/8 inches thick, 4 3/8 inches wide and 6 inches tall with 288 pages. It is ideal to take with you in the woods to help identify mushrooms.

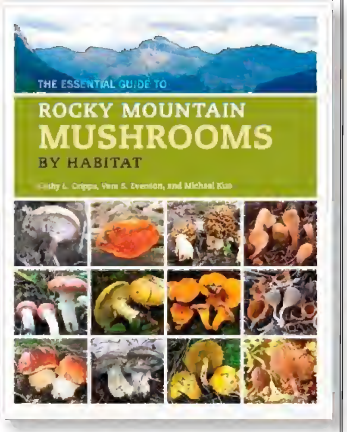
I think most people who belong to NAMA and those who attend North East Mycological Federation Forays know or have heard of Walt. He is head mycologist at the North American Mycological Association's annual foray this year. He has served as President of the Ohio Mushroom Society and Vice President of NAMA. Walt is co-author of Wax Cap Mushrooms of Eastern North America and Mushrooms and Macrofungi of Ohio and the Midwestern States. He has received NAMA's award for Contributions to Armature Mycology and NEMF's Friend of the Amateur Award.

Theresa Marrone has studied wild edibles for three decades. She is the author of more than a dozen outdoor books. This book has hundreds of color photos and easy to understand text, making learning about wild mushrooms found in northeast North America easier to do. The introduction is done in a very interesting way using pictures in most cases, rather than drawings to illustrate the points. For instance, there are 8 pictures showing the different kinds of gills and how they are attached and 4 different pictures showing mushroom pores. There are 9 different pictures showing the different categories of mushrooms and much more.

On the left page is a description of the mushroom including habitat, description, season, names, comparison and notes. This makes it an easy to use book. On the right pages are pictures, many of which were taken by Walt Sturgeon, who is an award winning mushroom photographer. They are clear and useful and occasionally there is a close up insert of a feature of the mushroom. There is a helpful bibliography section, a useful glossary, and a valuable index. The book covers 400 mushroom species with both common and scientific names. It includes a Top Edible section and a Top Toxic section.

I highly recommend the book as a useful field guide for both beginner and intermediate mushroomer. It should be on your buy list. You can get it on Amazon.com for $14.75. ISBN-10:1591935911

# Review of *The Essential Guide to Rocky Mountain Mushrooms by Habitat*




By Cathy L. Cripps, Vera S. Evenson, and Michael Kuo

Whatever biological discipline tickles your fancy, inevitably, we tend to focus primarily upon our target groups, and often ignore the wider ecological picture. This fine new book on Rocky Mountain (RM) fungi, by primary author Cathy Cripps and her mycological colleagues Vera Evenson and Michael Kuo, attempts to show us the broader perspective.

If we consider nature to be a tapestry of many threads, with the fungal world merely one colorful thread, then we cannot really understand the entire pattern without including the rest of that warp and woof. The fungi that we seek are intimately tied into the botany, zoology, geography and geology of a particular region or life zone. These deep relationships are beautifully illustrated in this new book.

Authors Cripps, Evenson and Kuo broke the RM region down into its distinctive habitats: from the unique and fascinating alpine zones to its broad swatches of species specific conifer forests to semi-arid shrublands to prairie grasslands and more. Typical macro-fungi that are found in each distinctive zone are well described and illustrated; novel fungi are also added to peak the interest of more experienced and thrill-seeking mushroomers, and those who wish to go deeper in their fungal studies. Each distinctive habitat or zone is well described, including the plants, animals and geography that define it, and how our too often ignored fungi fit neatly into the whole.

The inner cover shows a quick guide to fungal species found in the various habitats described within the book. Not every possible fungus is shown, but those most likely to be encountered are listed, with a page reference. The inner back cover shows Rocky Mountain landmarks such as distinctive mountain ranges found within the Rockies. This would allow you to easily target areas in which to search for fungi in your ecological zone of choice. This book is designed primarily for somewhat experienced mushroom hunters, and provides an entire new way of looking at fungi: as parts of their ecological wholes.

Cripps wrote most of the text, including the introduction, most of the habitat descriptions, quick guide, key and index. Cripps and Evenson co-authored the intro to semi-arid shrubland. Evenson wrote up the ecologies of the American Prairie and the Ponderosa Pine forests. One couldn't ask for better guides to these distinctive habitats and their fungal denizens than Cripps and Evenson: between the two of them, they have over 100 years of collecting experience in the Rocky Mountain region! Cripps and Kuo co-authored the ecological intros to the Lodgepole pine forests and the Spruce-fir forests. Species description authors were primarily correlated with photo contributions.

Some of the photos used were excellent, others merely serviceable, but all were large format and emphasized important morphological features. Each mushroom photo was coupled with its species description on a single page. Spore print color was emphasized, but few to no microscopic details were given. This might prove frustrating to those who wish to go deeper in their identifications. But this book is not meant to be an exhaustive compendium of deep description, but rather an overview of RM fungi in their natural habitats, with the focus on macro-features.

Consider this book to be a Myco-Eco-Tour of the Rockies, led by authors who are intimately conversant on both the fungi and the ecosystems in which they exist and thrive. It was a delight to peruse some of the more unusual habitats and their accompanying fungi which are described in this book, like the snowmelt fungi and burned forests and alpine forest, where the "trees" don't grow above knee-height, and the air is so very, very thin! Believe me, it's worth the crawl to see these special places, and as we all know, the slower you go, the more you'll see!

Not only is this book a great introduction to the fungi of the Rockies, where to find them, and how to recognize them once you do, but it is also a pleasure to read. I whiled away quite a few happy hours on my plane flight home from Sydney, Australia, reading those "you are there" descriptions of Rocky Mountain habitats: a nice reintroduction to our own glorious NA continent, after being well-steeped and awestruck over the marvelous alien biology of the magical land of OZ!

Released in paperback form, this thin and lightweight volume can be easily and readily carried into the field. I highly recommend buying this book and carrying it along if you plan on hunting mushrooms in the Rockies. Even if you are merely an armchair traveler, this book will bring the experience of hunting mushrooms in the Rockies right up to your own front door, no jet lag necessary.

Kudos to authors Cripps, Evenson and Kuo for another job well done. I can't wait to try this book out in the field!

Debbie Viess

First publication: *Mushroom, the Journal of Wild Mushrooming*, Winter/Spring 2016.

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Newsletter of the North American Mycological Association
THE MYCOPHILE

## Mushroom of the Issue

***Lactarius hibbardae*** Photo by Terry Stoleson of CVMS

*Lactarius hibbardae* has a scurfy dry cap that is pinkish grey to pinkish brown. Initially the faintly zoned cap margin is inrolled, but as it expands and fully opens it can become somewhat wavy. Both the flesh and the latex taste acrid. In young specimens the latex is white and plentiful, but it becomes watery with maturity. This mushroom has a sweet odor of coconut. As it dries, the scent can also be reminiscent of anise. *Lactarius hibbardae* fruits between July and October and can found in mixed woods under conifers and hardwoods. It is often fairly common in damp moss covered areas. Edibility of this eastern species has not been determined.